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10/574,607	04/05/2006	Noriyuki Fukui	288058US2PCT	4208
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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER CASCA, FRED A	
			ART UNIT	PAPER NUMBER
			2617	
			NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/574,607	Applicant(s) FUKUI ET AL.	
	Examiner FRED A. CASCA	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAIL ACTION

1. This action is in response to applicant's amendment filed on September 12, 2008. Claims 10-19 are still pending in the present application. **This Action is made FINAL.**

2. The office action of 12/17/2008 has been vacated. Therefore, this office action is provided in response to applicant's amendment/remarks filed on September 12, 2008.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 10 -19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 10 recites the limitations "the terminal transmitting a request for a resource assignment", "terminal acquiring an initial value of a resource for data transmission", "acquiring the initial value", "resource for data transmission is not remained", and "regardless of whether the resource for data transmission is remained". None of the above mentioned limitations are defined or mentioned in the specification. Only the new revised abstract mentions the above mentioned limitations. However, the new abstract only repeats the exact language of the claim without any further explanations. There is insufficient explanation of how a terminal transmits a

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request for a resource management to the base station, how an initial value is acquired, and how the terminal "not transmit" the new data when the resource for data transmission is not remained.

Claims 11-13 are rejected under for the same reasons that claim 10 is rejected. The same limitations of claim 10 also appear within claims 11-13.

New Matter

5. Claims 10-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Independent claims 10-13 have been amended to contain new matter.

The limitations, "the terminal transmitting a request for a resource assignment", "terminal acquiring an initial value of a resource for data transmission", "acquiring the initial value", "resource for data transmission is not remained", and "regardless of whether the resource for data transmission is remained" has been added to claim 10 has not been described in the specification. Only the new revised abstract mentions the above mentioned limitations. Similarly claims 11-13 has been amended with the same limitations as that of amended claim 10.

Further, newly added claims 16 and 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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The limitation, “wherein the base station further includes a scheduling unit configured to estimate a transmission time zone for retransmission data transmitted by the terminal, and the first unit transmits information on the value of the resource for data transmission to another terminal that requests resource assignment from the base station, the information on the value of the resource for data transmission incorporating the estimated transmission time zone estimated by the scheduling unit,” in new claim 16 an analogous limitation in claim 19 has not been found or described in the specification.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Wei et al (US Pub. No. 2003/0227875 A1).

Referring to claim 10, Wei discloses a communication method in a communication system (abstract) including a base station and a terminal (figure 1), the terminal transmitting a single data as a new data to the base station (figure 1 and 4 and paragraphs 24-25), and upon receiving an NAK signal indicating a reception failure from the base station as a response to the transmission of the new data, transmitting the single data as retransmission data to the base station, the communication (abstract, paragraph 9 and figures 4-9) method comprising acquiring including the terminal transmitting a request for a resource assignment to the base station (figures 4-9 and paragraphs 24, 25 and 56); and the terminal acquiring an initial value of a

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resource for data transmission that can be reduced with time (figures 4-9 and paragraphs 56-57); transmitting including, after acquiring the initial value at the acquiring (figures 2, 4-9 and 37), the terminal not transmit the new data to the base station when the resource for data transmission is not remained (figures 4-9 and paragraphs 9, 75, 79-80, 84 and 87); and the terminal transmitting the new data to the base station when the resource for data transmission is remained (figures 4-9 and paragraphs 9, 75, 79-80, 84 and 87, “sending NAKs at the RLP sublayer to request retransmission of these missing RLP frames, the receiver RLP starts a delayed NAK timer”); and retransmitting including the terminal transmitting, when the new data is transmitted to the base station at the transmitting and the NAK signal is received from the base station as a response to the new data, the retransmission data to the base station regardless of whether the resource for data transmission is remained upon transmitting the retransmission data (figures 4-9 and paragraphs 9, 75, 79-80, 84 and 87, “retransmission of the RLP frame through a false-alarm NAK”).

Referring to claims 11-13, claims 11-13 recite features analogous to the features of the method defined by claim 10 (as rejected above). Thus, Wei discloses all elements of claims 11-13 (please see the rejection of claim 10 above).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wei et al (US Pub. No. 2003/0227875 A1).

Referring to claim 14, Wei discloses the communication method according to claim 10.

Wei does not specifically disclose wherein in the fourth step the retransmission data is transmitted after a predetermined time defined between the terminal and the base station has elapsed since reception of the NAK signal in the format claimed.

However, Wei discloses retransmission scheme allows a lost encoder packet to be retransmitted without waiting for the delayed NAK from the receiver RLP, which may occur after a longer delay (Par. 115).

It would have been obvious to a person of ordinary skill in the art at the time of invention to modify the method of Wei in the format claimed, for the purpose of providing an efficient communication system.

Claim 17 recites features analogous to the features of claim 14. Thus, it is rejected for the same reasons as set forth in the rejection of claim 14.

10. Claims 15, 16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wei et al (US Pub. No. 2003/0227875 A1) in view of well known prior art (MPEP 2144.03).

Referring to claim 15, Wei discloses the communication method according to claim 10.

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Wei does not specifically disclose wherein in the fourth step the retransmission data is transmitted at a coding rate lower than an initial coding rate used in the third step.

The examiner takes official notice of the fact that retransmission of data at a lower data rate is well known in the art.

It would have been obvious to a person of ordinary skill in the art at the time of invention to modify the method of Wei in the format claimed, for the purpose of providing an efficient communication system.

Referring to claim 16, Wei discloses the communication system according to claim 11.

Wei does not specifically disclose wherein the base station further includes a scheduling unit configured to estimate a transmission time zone for retransmission data transmitted by the terminal, and the first unit transmits information on the value of the resource for data transmission to another terminal that requests resource assignment from the base station, the information on the value of the resource for data transmission incorporating the estimated transmission time zone estimated by the scheduling unit, in the format claimed.

The examiner takes official notice of the fact that retransmission at different time zones is well known in the art.

It would have been obvious to a person of ordinary skill in the art at the time of invention to modify the method of Wei in the format claimed, for the purpose of providing an efficient communication system.

Claim 18 recites features analogous to the features of claim 15. Thus, it is rejected for the same reasons as set forth in the rejection of claim 15.

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Claim 19 recites features analogous to the features of claim 16. Thus, it is rejected for the same reasons as set forth in the rejection of claim 16.

Response to Arguments

11. Applicant's arguments with respect to claims 10-19 have been considered but are they are not persuasive.

In response to arguments with respect to 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement, the examiner asserts that the limitations “the terminal transmitting a request for a resource assignment”, “terminal acquiring an initial value of a resource for data transmission”, “acquiring the initial value”, “resource for data transmission is not remained”, and “regardless of whether the resource for data transmission is remained” are not defined or mentioned in the specification. Only the new revised abstract mentions the above mentioned limitations. However, the new abstract only repeats the exact language of the claim without any further explanations. There is insufficient explanation of how a terminal transmits a request for a resource management to the base station, how an initial value is acquired, and how the terminal "not transmit" the new data when the resource for data transmission is not remained.

Further, applicants failed, in Arguments/Remarks filed on 09/12/2008, to point out where and how the specification describes the new limitations discussed above. In the Arguments/Remarks of 09/12/2008, applicants requested the examiner to withdraw the rejection of claims under 35 USC 112; however, applicants did provide evidence as to how or why the 112 rejection was improper. Therefore, the rejection 112 is maintained.

With respect to rejection of claims under 35 USC 103, applicant argues that the cited references do not disclose "to transmit a retransmission data to the base station regardless of the

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value of the resource for data transmission." The examiner respectfully disagrees. Note that value of a resource is interpreted as the bandwidth or frequency allocated to particular access point and/or mobile station at the time of transmission. Further, a person of ordinary skill in the art would know that a retransmission in response to a NAK would occur regardless of what channel or frequency is assigned to the mobile station or access point. Therefore, the rejection of claims under 35 USC 103 is maintained. Please see the Office Action of July 10, 2008 for further details.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

References Steinhorst et al (US 20040264962 A1), LoGalbo et al (US 7408931 B2) and Khan et al (US 6367045 B1) teaches retransmission at a lower data rates.

References Uesugi et al (US 20030072266 A1) and Lee et al (US 20030185242 A1) discloses the concept of retransmission at a retransmission time zone.

13. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRED A. CASCA whose telephone number is (571)272-7918. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Harper, can be reached at (571) 272-7605. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/VINCENT P. HARPER/

Supervisory Patent Examiner, Art Unit 2617